

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A measuring device for movements on a weaving machine (1), with which measuring device (2) digital signals can be produced at discrete points in time occurring in a periodic sequence, by means of positional determination of one or more identifiable points or positions (31) which are located on a moved surface (30) and within a ~~two dimensional~~ two-dimensional measuring window (3) of the measuring device, these signals being able to be evaluated for determining an interval which can be associated with the changes in position of the identifiable positions,

~~characterised in that optical and electronic components (21,22,23,20)~~ wherein the measuring device includes a modular measuring head in which a light source for oblique illumination of the moved surface within the measuring window, an image sensor and an electronic circuit are integrated ~~in the measuring device~~ for effecting a pattern recognition, ~~in that wherein~~ the identifiable positions can be defined by the pattern recognition, ~~in that wherein~~ the positions of at least some of these positions can be determined at two sequential points in time of the said sequence, ~~in that the~~ and wherein an interval associated with the changes in position can be calculated at each of the discrete points in time and thus the length of a path (L) travelled by the moved surface and also its speed (v , V) can be determined at these points in time.

Claim 2 (currently amended): A measuring device in accordance with claim 1 ~~characterised in that it~~ wherein the measuring head is arranged for the determination of the warp thread speed (v) at the weaving machine above or below a warp (10') and also between a warp beam (11) and warp thread monitors (16) and in that the warp threads (10) are in contact with an

element (4) in the measuring region, through which a transverse oscillation of the warp threads can be suppressed.

Claim 3 (currently amended): A measuring device in accordance with ~~claim 1~~ characterised in that a claim 1 wherein the measuring head of the measuring device (2) is arranged in the region of a cloth take-off (19) where the take-off speed of the cloth (18) which has been produced can be determined.

Claim 4 (currently amended): A measuring device in accordance with claim 1 characterised in that wherein a measuring head of the measuring device (2) is arranged at the edge of the warp beam (11) where the rotational speed of the warp beam can be determined.

Claim 5 (currently amended): A measuring device in accordance with claim 1, characterised in that wherein the warp (10) at the weaving machine (1) can be drawn off by at least two part warp beams, ~~in that wherein~~ the measuring device (2) includes a plurality of measuring heads, ~~in that wherein~~ each part warp beam is associated with one of the measuring heads, namely for the measuring of the warp thread speeds corresponding to the part warp beams, and ~~in that wherein~~ a control unit is part of the weaving machine, by which the warp thread take-off can be ~~synchronised~~ synchronized by ~~equalising~~ equalizing the warp thread speeds.

Claim 6 (canceled)

Claim 7 (currently amended): A method in accordance with claim 6, characterised in that 11 wherein an image processor is used which produces quadrature signals (S_A, S_B) corresponding to the changes in position and in that a length of a path (L) travelled by the moved surface and also its speed (v) is determined at the discrete points in time from the quadrature signals by means of electronic calculation.

Claim 8 (currently amended): A method in accordance with claim 7;
~~characterised in that~~ including determining the length of a path (L) travelled by warp threads in
the forward direction and ~~also an intermediate speed (V) of the warp threads is determined.~~

Claim 9 (currently amended): A method in accordance with claim 8;
~~characterised in that in determining the mean speed (V) a filter (F), is used, in particular~~
including using a 1Hz filter for determining the mean speed.

Claim 10 (currently amended): A method in accordance with claim 6
~~characterised in that 11 including compensating for a reverse movement is compensated for~~
without error by filtering and ~~time-synchronised~~ time-synchronized sampling with the weaving
machine cycle.

Claim 11 (new): A method of measuring movements of a moved surface on a
weaving machine comprising providing a measurement device, integrating a modular measuring
head including a two-dimensional window, a light source for obliquely illuminating the moved
surface within the measuring window, an image sensor, and an electronic circuit in the
measurement device, with the measurement device producing digital signals at discrete points in
time occurring in a periodic sequence by positionally determining one or more identifiable points
or positions located on the moved surface within the measuring window, defining the identifiable
positions by pattern recognition, determining the positions of at least some of the positions at two
sequential points in time of the said sequence, calculating an interval associated with the changes
in position at each of the discrete points in time, and determining a length of a path travelled by
the moved surface and its speed at the points in time.

Amendments to the Drawings:

Attached hereto is amended drawing sheet 1 and a new drawing sheet 3. On sheet 1, Fig. 1 was revised to illustrate a second measuring device.

Fig. 6 is new and illustrates a weaving machine with a two-part warp beam.

Support for the amended drawing is found on page 1, third paragraph, page 6, first full paragraph, and claims 3 and 5 as originally filed.

No new matter has been added.

Attachment: Replacement Sheets